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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/618,101

07/11/2003

Joseph R. Byrum

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EXAMINER

ROBINSON, KEITH O NEAL

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/618,101	Applicant(s) BYRUM ET AL.	
	Examiner Keith O. Robinson, Ph.D.	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 33-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>June 11, 2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 11, 2007 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action mailed May 5, 2006. Applicant's amendments to claims 1 and 30, filed June 11, 2007, have been received and entered in full.
3. Claims 33-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on March 9, 2006.
4. Claims 1-32 are under examination.

Response to Arguments

5. Applicant has provided evidence of an English translation of the Lu et al reference, (Lu et al., Soybean Bulletin 2001) (see page 9, 2nd paragraph of 'Remarks' filed June 11, 2007).
6. Applicant's arguments with regards to the 35 USC 102 (b) rejection (Cober et al) of claims 1-14 and 16-29 on pages 7-8 of the Office Action mailed January 9, 2007 are

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persuasive (see page 17, 1st full paragraph to page 18, last paragraph of 'Remarks' filed June 11, 2007). The rejection has been withdrawn.

7. Applicant's arguments with regards to the 35 USC 102 (b) rejection (Wilcox) of claims 1-14 and 16-29 on page 8 of the Office Action mailed January 9, 2007 are persuasive (see page 19, 1st paragraph of 'Remarks' filed June 11, 2007). The rejection has been withdrawn.

8. Applicant's arguments with regards to the 35 USC 102/103 rejection of claims 15-32 on pages 9-10 of the Office Action mailed January 9, 2007 are persuasive (see page 19, 2nd paragraph to page 20, 1st full paragraph of 'Remarks' filed June 11, 2007). The rejection has been withdrawn.

Claim Rejections - 35 USC § 112, first paragraph – Written Description

9. Claims 1-32 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The rejection is repeated for the reasons of record as set forth in the Office Action mailed January 9, 2007 (see pages 3-5).

Applicant's arguments, filed June 11, 2007, have been fully considered but they are not persuasive.

Applicant argues the amendment of claim 1 to recite soybean variety SN30003 as a parent plant demonstrates that Applicant was in possession of the claimed

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invention (see page 9, last paragraph to page 11, 1st paragraph of 'Remarks' filed June 11, 2007).

This is not persuasive. See MPEP 2163(I) where it states "[t]o satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. See, e.g., *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1319, 66 USPQ2d 1429, 1438 (Fed. Cir. 2003); *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d at 1563, 19 USPQ2d at 1116".

The specification only provides evidence that Applicant was in possession of soybean varieties 0007583, 0008079, 0137335, 0137472, 0137441 and 0137810 (see pages 43-62 of the specification). Also see MPEP 2163.02 where it states, "[a]n objective standard for determining compliance with the written description requirement is, 'does the description clearly allow persons of ordinary skill in the art to recognize that he or she invented what is claimed.'" In re Gosteli, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989)".

In the instant invention, one of ordinary skill in the art would only recognize that Applicant has invented soybean varieties 0007583, 0008079, 0137335, 0137472, 0137441 and 0137810 (see pages 43-62 of the specification).

MPEP 2163.02 further states, "[u]nder *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir.1991), to satisfy the written description requirement, an applicant must convey with reasonable clarity to those

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skilled in the art that, as of the filing date sought, he or she was in possession of the invention, and that the invention, in that context, is whatever is now claimed”.

In the instant case, Applicant has conveyed with reasonable clarity to those skilled in the art that, as of the filing date sought, Applicant was in possession of soybean varieties 0007583, 0008079, 0137335, 0137472, 0137441 and 0137810 (see pages 43-62 of the specification).

Thus, based on the disclosure of the specification, Applicant has only shown possession of soybean varieties 0007583, 0008079, 0137335, 0137472, 0137441 and 0137810 (see pages 43-62 of the specification).

See *Vas-Cath Inc. v. Mahurkar* 1991 (CA FC) 19 USPQ2d 1111, 1115, which teaches that the purpose of the written description is for the purpose of warning an innocent purchaser, or other person using a machine, of his infringement of the patent; and at the same time, of taking from the inventor the means of practicing upon the credulity or the fears of other persons, by pretending that his invention is more than what it really is, or different from its ostensible objects, that the patentee is required to distinguish his invention in his specification.

Applicant argues that claims 30-32 are independent method claims and should not be included in the rejection (see page 11, 2nd paragraph to page 12, 1st full paragraph of ‘Remarks’ filed June 11, 2007).

This is not persuasive. As it is unclear what are the conditions of the deposit (see page 41, 7th paragraph of the specification), it is unclear if Applicant is in possession of

soybean variety SN30003. Thus, it is unclear if the methods of claims 30-32 are adequately described.

Claim Rejections - 35 USC § 112, first paragraph - Enablement

10. Claims 1-29 and 32 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for soybean varieties 0007583, 0008079, 0137335, 0137472, 0137441 and 0137810, does not reasonably provide enablement for each and every progeny of soybean variety SN30003. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The rejection is repeated for the reasons of record as set forth in the Office Action mailed January 9, 2007 (see pages 5-7). Applicant's arguments, filed June 11, 2007, have been fully considered but they are not persuasive.

Applicant argues the claims have been amended to recite soybean plants derived from a cross with soybean variety SN30003, thus satisfying the enablement requirement (see page 13, 1st full paragraph to page 14, lines 1-8 of 'Remarks' filed June 11, 2007).

This is not persuasive. The specification only provides enablement for soybean varieties 0007583, 0008079, 0137335, 0137472, 0137441 and 0137810 (see pages 43-62 of the specification).

Applicant's arguments with regards to undue trial and error experimentation as it pertains to screening soybean plants for the desired trait are persuasive (see page 14, 1st full paragraph to page 15, 1st full paragraph of 'Remarks' filed June 11, 2007);

however, this does not overcome the enablement rejection because the specification only provides enablement for soybean varieties 0007583, 0008079, 0137335, 0137472, 0137441 and 0137810.

Applicant arguments with regards to the term "single locus conversion" are persuasive (see page 15, last paragraph to page 16, lines 1-4 of 'Remarks' filed June 11, 2007).

Applicant arguments with regards to screening plants are persuasive (see page 16, 1st full paragraph 'Remarks' filed June 11, 2007).

Applicant arguments with regards to undue experimentation to produced the claimed plants are persuasive (see page 16, last paragraph to page 17, lines 1-4 of 'Remarks' filed June 11, 2007).

Claim Rejections - 35 USC § 103

11. Claims 15 and 30-32 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcox (Crop Sci. 38: 900, 1998), in view of Conway (U.S. Patent No. 6,140,556, October 31, 2000). The rejection is repeated for the reasons of record as set forth in the Office Action mailed January 9, 2007 (see pages 10-11). Applicant's arguments, filed June 11, 2007, have been fully considered but they are not persuasive. It is noted that the Examiner mistakenly left out the Conway citation in the Office Action mailed January 9, 2007; however, Applicant is correct, as stated on page 20, 2nd full paragraph of 'Remarks' filed June 11, 2007, in assuming that the reference is still relevant.

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Applicant argues that soybean plant C1944 is a breeding line and not an elite line or variety and that this line does not display at least 20% seed oil content (see page 20, last paragraph of 'Remarks' filed June 11, 2007).

This is not persuasive. The specification teaches, "SN30003 corresponds to variety c1944" (see page 43, line 22). One of ordinary skill in the art would understand that even though SN30003 (also known as C1944) does not display at least 20% seed oil content the other plant used in the cross to produce the claimed invention would, in fact, have at least 20% seed oil content and Conway teaches using a soybean cultivar in a cross with another soybean cultivar to produce novel soybean cultivars.

New Claim Rejections - 35 USC § 102/103

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-32 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cober et al (Crop Sci. 40: 39-42, 2000).

The claims read on an agronomically elite soybean plant of a variety having a mean whole seed total protein content of between 45% and 50%, a mean whole seed total protein plus oil content of between 64% and 70%, a mean whole seed total oil content of at least 20%, and a commercially significant yield, wherein the soybean plant is a progeny plant of soybean variety SN30003, or a subsequent generation thereof and methods of using said plant.

Cober et al disclose soybean plants having whole seed total protein content between 45% and 50%, total protein plus oil content of between 64% and 70% and a commercially significant yield (defined on page 38, lines 19-22 of the specification as at least 35 bushels per acre) (see page 41, Table 3).

In addition, Cober et al disclose soybean plants having whole seed total oil content of at least 20% (see page 41, Figure 3 wherein it depicts seed oil content from randomly selected soybean plants, many of which have at least 20% seed oil content).

The soybean plant taught by the prior art differs from the claimed soybean plant only in their method of making, namely by the use of different parental material in the prior art. However, the method of making the claimed soybean plant would not distinguish it from the prior art soybean plant. See *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985), which teaches that a product-by-process claim may be properly rejectable over prior art teaching the same product produced by a different process, if the process of making the product fails to distinguish the two products. See *In re Best*, 195 USPQ 430, 433 (CCPA 1997), which teaches that where the prior art product seems to be identical to the claimed product, except that the prior art is silent as to a

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particularly claimed characteristic or property, then the burden shifts to Applicant to provide evidence that the prior art would neither anticipate nor render obvious the claimed invention.

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of Applicant's invention to produce the claimed invention.

One of ordinary skill in the art would have been motivated to produce the claimed invention because based on Table 3 and Figure 3, Cober et al teach soybean plants having a mean whole seed total protein content of between 45% and 50%, a mean whole seed total protein plus oil content of between 64% and 70%, a mean whole seed total oil content of at least 20%, and a commercially significant yield.

In addition, one of ordinary skill in the art would have reasonable expectation of success based on the success of Cober et al in producing soybean plants with the claimed characteristics.

New Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 1-14 and 16-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcox (Crop Sci. 38: 900, 1998), in view of Conway (U.S. Patent No. 6,140,556, October 31, 2000).

The claims read on an agronomically elite soybean plant of a variety having a mean whole seed total protein content of between 45% and 50%, a mean whole seed total protein plus oil content of between 64% and 70%, a mean whole seed total oil content of at least 20%, and a commercially significant yield, wherein the soybean plant is a progeny plant of soybean variety SN30003, or a subsequent generation thereof and methods of using said plant.

Wilcox teaches an agronomically elite soybean plant, namely C1944, having a mean whole seed total protein content of between 45% and 50%, a mean whole seed total protein plus oil content of between 64% and 70%, and a commercially significant yield (see page 900).

The specification teaches that "SN30003 corresponds to variety c1944" (see page 43, line 22).

Wilcox does not teach that C1944 (also known as SN30003) has 20% seed oil content; however, one of ordinary skill in the art would understand that even though SN30003 (also known as C1944) does not display at least 20% seed oil content the

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other plant used in the cross to produce the claimed invention would, in fact, have at least 20% seed oil content.

Conway teaches using a soybean cultivar in a cross with another soybean cultivar to produce novel soybean cultivars (see column 2, lines 38-41).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of Applicant's invention to combine the above teachings to produce the claimed invention.

One of ordinary skill in the art would have been motivated to combine these teachings because Wilcox teaches, "[t]he lines will be useful for increasing seed protein while minimizing reductions in seed oil content (see page 900, 1st column, 1st paragraph).

In addition, one of ordinary skill in the art would have reasonable expectation of success because Wilcox teaches a soybean plant having a mean whole seed total protein content of between 45% and 50%, a mean whole seed total protein plus oil content of between 64% and 70%, and a commercially significant yield and one of ordinary skill in the art would understand how to use said plant in a cross with another soybean plant having high seed oil content to produce a soybean plant with the claimed characteristics.

Conclusion

18. No claims are allowed.

Contact Information

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith O. Robinson, Ph.D. whose telephone number is (571) 272-2918. The examiner can normally be reached Monday – Friday, 7:30 a.m. - 4:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached at (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Keith O. Robinson, Ph.D.

August 29, 2007

DAVID H. KRUSE, PH.D.
PRIMARY EXAMINER

